UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/698,807	SITARAMAN ET AL.
	Examiner	Art Unit	
	Chandrahas Patel	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 September 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-61* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 September 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

Examiner is grateful to applicant for submitting formal drawings of figures 3-6, therefore examiner withdraws objection to drawings.

Response to Arguments

1.   Applicant's arguments filed 9/13/2007 have been fully considered but they are not persuasive.

Regarding claim 1, applicant argues that multiple paths do not refer to SPVC bundle. However, applicant does not describe how SPVC bundle is created therefore examiner disagrees and cited reference teaches creating an SPVC bundle. Col. 3, lines 34-36 clearly state each member of SPVC comprises PVC and SVC. SPVC is SVC as described in the Veeneman's background of the invention in Col. 1, lines 28-45. HSPVC is comprised of SVC and PVC as clearly stated in Col. 4, lines 55-58. Col. 3, lines 59-64 describe if paths are within the SPVC cloud then only PVC are setup which is another variation of HSPVC path and does not teach away from the invention. Connecting HSPVC will have to transmit a setup message for connecting source to destination as its required and also described in Col. 3, lines 50-63.

Regarding claim 2, applicant argues that cited portion does not teach receiving parameters defining the SPVC bundle at the source end, and the configuration information is transmitted to the destination corresponding to the parameters. Looking at Fig. 4, link cost are parameters defining the SPVC bundle which is transmitted to destination to choose path x to y.

Regarding claim 3, applicant argues that SPVC bundle is not crated automatically. 46020 creates paths automatically based on cost links associated with the paths as described in Col. 3, lines 53-56.

Regarding claim 5, examiner is referring to Col. 4, lines 24-25, while applicant is referring to Col. 4, lines 22-23; and cited portion teaches limitation of claim 5 as described below.

Regarding claim 11, applicant argues that cited portion does not include SVC links in creating SPVC bundle. However, examiner disagrees as follows: Col. 3, lines 34-36 clearly state each member of SPVC comprises PVC and SVC. SPVC is SVC as described in the Veeneman's background of the invention in Col. 1, lines 28-45. HSPVC is comprised of SVC and PVC as clearly stated in Col. 4, lines 55-58. Col. 3, lines 59-64 describe if paths are within the SPVC cloud then only PVC are setup which is another variation of HSPVC path and does not teach away from the invention. Applicant states that cited portion does not teach extracting parameters from the SPVC bundle information. However, applicant does not describe which parameters are being extracted therefore examiner maintains his rejection and cited portion teaches extracting PVC and SPVC portions of routes which are parameters of SPVC links. Applicant argues that Veeneman does not teach creating the SPVC bundle based on the extracted parameters and each of the member SPVCs being associated with respective connection characteristics. Veeneman teaches BWA sends a list to end point, which is used to create SPVC portion, and cost of link is associated with each link.

Regarding claim 18, Veeneman teaches setting up HSPVC which allocates PVC connection and an SVC connection since HSPVC is comprised of PVC and SPVC.

Regarding claim 44-52, applicant argues that examiner refers to substantially the same portions of the cited references used for other claims. However, the examiner looked into applicant's specification for means plus interpretation at the time of 1st office action. The cited portions teach the limitation described in specification therefore maintains the rejection to claims 44-52.

Specification

1.   The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-5, 11, 12, 18-20, 26-28, 34-36, 42-46, 49, 50, 52-55, 58, 59, 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Veeneman et al. (USPN 6,771,650, Herein as Veeneman).

Regarding claim 1, Veeneman teaches a method for creating a bundle of soft permanent virtual circuits (SPVCs) coupling form a source end to a destination end via a communications network **[Fig. 4]**, comprising: creating an SPVC bundle for the source end **[Col. 3, lines 34-38, where bundle of paths are crated by multiple connections]** the SPVC bundle comprising a

plurality of member SPVCs [Fig. 2, 36170], each member SPVC comprising a permanent virtual

circuit (PVC) and a switched virtual circuit (SVC) [Col. 3, lines 34-36], each of the member

SPVCs being associated with a respective connection characteristic and coupling to a same

destination [Fig. 4, bundle of paths going from x to y and each path has a cost associated

with it]; and transmitting, from the source end to the destination end, an SPVC setup message

containing configuration information of the SPVC bundle [Col. 4, lines 55-64].

Regarding claims 2, 45, 54, Veeneman teaches receiving parameters defining the SPVC

bundle at the source end, the configuration information transmitted to the destination end

corresponding to the parameters [Col. 4, lines 43-46].

Regarding claim 3, Veeneman teaches automatically creating, at the destination end, in

response to the SPVC setup message, the SPVC bundle for the destination end in accordance

with the configuration information [Col. 4, lines 55-64].

Regarding claim 4, Veeneman teaches the connection characteristic comprises at least

one of: a quality of service parameter; and a traffic parameter [Col. 3, lines 64-67 – Col. 4, lines

1-2].

Regarding claims 5, 12, 20, 28, 36, 46, 50, 55, 59, Veeneman teaches the configuration

information comprises: bundle-level parameters; and parameters for individual member SPVCs

[Col. 4, lines 24-25].

Regarding claim 11, Veeneman teaches a method for creating, at a destination network

device, a bundle of soft permanent virtual circuits (SPVCs) coupling form a source network

device to the destination network device via a communications network [Fig. 4], comprising:

receiving and decoding an SPVC setup message containing SPVC bundle information for

creating an SPVC bundle coupled from a specified source end **[Col. 4, lines 55-58]**, the SPVC

bundle comprising a plurality of member SPVCs **[Fig. 2, 36170]**, each of the member SPVC

comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) **[Col. 3, lines**

34-36]; extracting parameters from the SPVC bundle information **[Col. 4, lines 20-22]**; and

creating the SPVC bundle based on the extracted parameters **[Col. 4, lines 24-25]**, each of the

member SPVCs being associated with a respective connection characteristic and coupled from

the specified source end **[Fig. 4, bundle of paths going from x to y and each path has a cost**

associated with it].

Regarding claims **18, 52, 61**, Veeneman teaches allocating a PVC connection and an

SVC connection on the destination network device for each member SPVC **[Col. 4, lines 55-59]**.

Regarding claim **19**, Veeneman teaches a network device for creating a bundle of soft

permanent virtual circuits (SPVCs) coupling form a source end to a destination end via a

communications network **[Fig. 4]**, network device comprising: an interface adapted to receive

commands and parameters to create an SPVC bundle comprising a plurality of member SPVCs

[Fig. 3, 36170, has interface to receive commands, Col. 3, lines 28-36], each of the member

SPVCs comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) **[Col.**

3, lines 34-36]; an SPVC bundle manager coupled to interface, adapted to configure the SPVC

bundle in accordance with the parameters **[Col. 3, lines 38-40]**, each of the member SPVCs

being associated with a respective connection characteristic and coupling to a same destination

[Fig. 4, bundle of paths going from x to y and each path has a cost associated with it]; an

SPVC manager coupled to SPVC bundle manager, adapted to create an SPVC bundle setup

request and SPVC bundle information based on data received from SPVC bundle manager **[Col.**

3, lines 50-54]; and a signaling module coupled to SPVC manager, adapted to encode and

transmit an SPVC setup message containing the SPVC bundle information **[Col. 4, lines 20-26,**

BWA is the signaling module that send parameters containing SPVC bundle information].

Regarding claims 26, 34, Veeneman teaches a connection manager coupled to SPVC

bundle manager, adapted to allocate a PVC connection and an SVC connection on network

device for each of the member SPVCs **[Col. 4, lines 55-59]**.

Regarding claim 27, Veeneman teaches a network device for a destination end of a

bundle of soft permanent virtual circuits (SPVCs) coupling form a source end to the destination

end via a communications network **[Fig. 4]**, network device comprising: a signaling module

adapted to receive and decode an SPVC setup message containing SPVC bundle information for

creating an SPVC bundle coupled from a specified source end **[Col. 4, lines 55-58]**, the SPVC

bundle comprising a plurality of member SPVCs **[Fig. 2, 36170]**, each of the member SPVC

comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) **[Col. 3, lines**

34-36]; and an SPVC bundle manger adapted to extract parameters from the SPVC bundle

information **[Col. 4, lines 20-22]**; and to create the SPVC bundle, each of the member SPVCs

being associated with a respective connection characteristic and coupled from the specified

source end **[Fig. 4, bundle of paths going from x to y and each path has a cost associated**

with it].

Regarding claim 35, Veeneman teaches a system for creating a bundle of soft permanent

virtual circuits (SPVCs) coupling form a source end to a destination end via a communications

network **[Fig. 4]** the system comprising: a source network device **[Fig. 4, x]**, comprising: an

interface adapted to receive commands and parameters to create an SPVC bundle comprising a

plurality of member SPVCs **[Fig. 3, 36170, has interface to receive commands, Col. 3, lines 28-36]**, each of the member SPVCs comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) **[Col. 3, lines 34-36]**; a first SPVC bundle manager coupled to interface, adapted to configure the SPVC bundle to a specified destination bundle based on the parameters **[Col. 3, lines 38-40]**, each of the member SPVCs being associated with a respective connection characteristic and coupling to a same destination **[Fig. 4, bundle of paths going from x to y and each path has a cost associated with it]**; a first SPVC manager coupled to first SPVC bundle manager, adapted to create an SPVC bundle setup request and SPVC bundle information based on data received from first SPVC bundle manager **[Col. 3, lines 50-54]**; and a signaling module coupled to SPVC manager, adapted to encode and transmit an SPVC setup message containing the SPVC bundle information **[Col. 4, lines 20-26, BWA is the signaling module that send parameters containing SPVC bundle information]** and a destination network device **[Fig. 4, y]**, comprising: a second signaling module adapted to receive and decode the SPVC setup message containing SPVC bundle information **[Col. 4, lines 55-58]**; and a second SPVC bundle manger, adapted to extract parameters from the SPVC bundle information **[Col. 4, lines 20-22]** to configure the SPVC bundle and create the member SPVCs for the destination end **[Fig. 4, bundle of paths going from x to y]**.

Regarding claim 42, Veeneman teaches a first connection manager coupled to first SPVC bundle manager, adapted to allocate a PVC connection and an SVC connection on said source network device for each member SPVC **[Col. 4, lines 55-59, this connection manager is associated with x]**.

Regarding claim 43, Veeneman teaches a second connection manager coupled to second SPVC bundle manager, adapted to allocate a PVC connection and an SVC connection on destination network device for each member SPVC **[Col. 4, lines 55-59, this connection manager is associated with y]**.

Regarding claim 44, Veeneman teaches an apparatus for creating a bundle of soft permanent virtual circuits (SPVCs) coupling form a source end to a destination end via a communications network **[Fig. 4]**, comprising: means for creating an SPVC bundle for the source end **[Col. 3, lines 34-38, where bundle of paths are crated by multiple connections]** the SPVC bundle comprising a plurality of member SPVCs **[Fig. 2, 36170]**, each member SPVC comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) **[Col. 3, lines 34-36]**, each of the member SPVCs being associated with a respective connection characteristic and coupling to a same destination **[Fig. 4, bundle of paths going from x to y and each path has a cost associated with it]**; and means for transmitting, from the source end to the destination end, an SPVC setup message containing configuration information of the SPVC bundle **[Col. 4, lines 55-64]**.

Regarding claim 49, Veeneman teaches an apparatus for creating, at a destination network device, a bundle of soft permanent virtual circuits (SPVCs) coupling form a source network device to the destination network device via a communications network **[Fig. 4]**, comprising: means for receiving and decoding an SPVC setup message containing SPVC bundle information for creating an SPVC bundle coupled from a specified source end **[Col. 4, lines 55-58]**, the SPVC bundle comprising a plurality of member SPVCs **[Fig. 2, 36170]**, each of the member SPVC comprising a permanent virtual circuit (PVC) and a switched virtual circuit

(SVC) [Col. 3, lines 34-36]; means for extracting parameters from the SPVC bundle information

[Col. 4, lines 20-22]; and means for creating the SPVC bundle based on the extracted parameters

[Col. 4, lines 24-25], each of the member SPVCs being associated with a respective connection

characteristic and coupled from the specified source end [Fig. 4, bundle of paths going from x

to y and each path has a cost associated with it].

Regarding claim 53, Veeneman teaches a program storage device readable by a

machine, tangibly embodying a program of instructions executable by the machine to perform a

method for creating a bundle of soft permanent virtual circuits (SPVCs) coupling form a source

end to a destination end via a communications network [Col. 2, lines 58-62, switches have

software to execute the instructions], comprising: creating an SPVC bundle for the source end

[Col. 3, lines 34-38, where bundle of paths are crated by multiple connections] the SPVC

bundle comprising a plurality of member SPVCs [Fig. 2, 36170], each member SPVC

comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC) [Col. 3, lines

34-36], each of the member SPVCs being associated with a respective connection characteristic

and coupling to a same destination [Fig. 4, bundle of paths going from x to y and each path

has a cost associated with it]; and transmitting, from the source end to the destination end, an

SPVC setup message containing configuration information of the SPVC bundle [Col. 4, lines 55-

64].

Regarding claim 58, Veeneman teaches a program storage device readable by a

machine, tangibly embodying a program of instructions executable by the machine to perform a

method for creating, at a destination network device, a bundle of soft permanent virtual circuits

(SPVCs) coupling from a source network device to the destination network device via a

communication network, [Col. 2, lines 58-62, switches have software to execute the
instructions], comprising: receiving and decoding an SPVC setup message containing SPVC
bundle information for creating an SPVC bundle coupled from a specified source end [Col. 4,
lines 55-58], the SPVC bundle comprising a plurality of member SPVCs [Fig. 2, 36170], each of
the member SPVC comprising a permanent virtual circuit (PVC) and a switched virtual circuit
(SVC) [Col. 3, lines 34-36]; extracting parameters from the SPVC bundle information [Col. 4,
lines 20-22]; and creating the SPVC bundle based on the extracted parameters [Col. 4, lines 24-
25], each of the member SPVCs being associated with a respective connection characteristic and
coupled from the specified source end [Fig. 4, bundle of paths going from x to y and each
path has a cost associated with it].

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 6, 7, 13, 14, 21, 22, 29, 30, 37, 38 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Veeneman et al. (USPN 6,771,650, Herein as Veeneman) in view of Allan et
al. (USPN 5,946,313, Herein as Allan).

Regarding claims 6, 13, 21, 29, 37, Veeneman teaches a method, a network device, and
a system as discussed in rejection of claims 5, 12, 20, 28, and 36 respectively.

However, Veeneman does not teach the bundle-level parameters comprise: network
service access point (NSAP) address; encapsulation parameters; and address map parameters.

Allan teaches the bundle-level parameters comprise: network service access point

(NSAP) address [Col. 8, lines 56-58]; encapsulation parameters [Col. 8, lines 61-63]; and

address map parameters [Col. 7, lines 62-64].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include NSAP to give a unique identification [Col. 8, lines 56-58]; encapsulation

parameter to avoid performing CRC check [Col. 8, lines 64-67 – Col. 9, lines 1-3]; address map

parameter so that address could be mapped to destination MAC [Col. 7, lines 62-64].

Regarding claims 7, 14, 22, 30, 38, Veeneman further teaches the parameters for

individual member SPVCs comprise **at least one of**: quality of service (QoS) parameters; traffic

parameters; and VPI/VCI values [Col. 3, lines 64-67 – Col. 4, lines 1-2].

6.   Claims 8, 15, 23, 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Veeneman et al. (USPN 6,771,650) in view of Allan et al. (USPN 5,946,313) as applied to claim

7 above, and further in view of Chang et al. (USPN 7,133,420, Herein as Chang).

Regarding claims 8, 15, 23, 31, 39, the references teach a method, a network device, and

a system as discussed in rejection of claims 7, 14, 22, 30, and 38 respectively.

However, the references do not teach the parameters for individual members of SPVCs

comprise **at least one of**: Internet Protocol (IP) precedence levels; and parameters specifying

bumping rules.

Chang teaches the parameters for individual members of SPVCs comprise **at least one**

of: Internet Protocol (IP) precedence levels; and parameters specifying bumping rules [Col. 7,

lines 23-26].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to have IP precedence level as one of the parameter for indicated quality of service

associated with the connection **[Col. 7, lines 23-26]**.

7.   Claims 9, 16, 24, 32, 40, 47, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Veeneman et al. (USPN 6,771,650, Herein as Veeneman) in view of Chang et al. (USPN

7,133,420, Herein as Chang).

Regarding claims 9, 16, 24, 32, 40, 47, 56, Veeneman teaches a method, a network

device, a system, an apparatus, and a program storage device as discussed in rejection of claims

1, 11, 19, 27, 35, 44, and 53 respectively.

However, Veeneman does not teach associating each of the member SPVCs with a

respective IP precedence level.

Chang teaches associating each of the member SPVCs with a respective IP precedence

level **[Col. 7, lines 23-26]**.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to associate each of the member SPVCs with a IP precedence level to indicate quality

of service associated with the member **[Col. 7, lines 23-26]**.

8.   Claims 10, 17, 25, 33, 41, 48, 51, 57, 60 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Veeneman et al. (USPN 6,771,650, Herein as Veeneman) in view of

Hamedani et al. (USPN 6,560,242, Herein as Hamedani).

Regarding claims 10, 17, 25, 33, 41, 48, 51, 57, 60, Veeneman teaches a method, a

network device, a system, an apparatus and a program storage device as discussed in rejection of

claims 1, 11, 19, 27, 35, 44, 49, 53, and 58 respectively.

However, Veeneman does not teach transmitting the SPVC setup message using the

Generic Application Transport information element (GAT IE).

Hamedani teaches teach transmitting the SPVC setup message using the Generic

Application Transport information element (GAT IE) **[Col. 6, lines 4-6]**.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to use GATE IE to transmit setup message so that routers that are not capable of

performing various conversions can be supported **[Col. 6, lines 9-17]**.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CBP

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